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VEGETATION OF ARTIFICIAL LAKES IN NORTHWESTERN ARKANSAS

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During recent years several artificial lakes or water reservoirs have been created in northwestern Arkansas. Aquatic and marsh vegetation has rapidly invaded these newly flooded areas which were formerly farm and forest land. In 1939, extensive collecting was done at four of these reservoirs to determine the nature and extent of natural revegetation. The reservoirs considered include Lake Wedington, near Fayetteville in Washington County; Lake Atalanta, near Rogers in Benton County; the reservoir at Cave Springs in Benton County and that in Devil's Den State Park, Washington County. Lake Wedington and Lake Atalanta each cover about 80 acres and have a maximum depth of about 40 feet. The reservoirs at Cave Springs and Devil's Den have areas of about 3 and 5 acres, respectively, and a depth of about 15 feet.

Two years after Lake Wedington began to fill, 39 species of aquatic and wet soil plants had established themselves. The commonest submerged species were Chara Braunii Gmel., Najas guadalupensis (Spreng.) Morong and Potamogeton Berchtoldi Fieber var. tenuissimus (Mert. & Koch) Fern. The most com-

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mon shoreline species was Eleocharis obtusa (Willd.) Schult. Other species collected include Typha latifolia L., Potamogeton nodosus Poiret, P. natans L., Alisma Plantago-aquatica L., Lophotocarpus calycinus (Engelm.) J. G. Smith, Sagittaria ambigua J. G. Smith, S. graminea Michx., S. latifolia Willd., S. rigida Pursh, Anacharis occidentalis (Pursh) Victorin, Eragrostis hypnoides (Lam.) BSP., Echinochloa pungens (Poiret) Rydberg, E. colonum (L.) Link, Leersia oryzoides (L.) Swartz, Carex gynandra Schwein., Cyperus acuminatus Torr. & Hook., C. esculentus L., C. ovularis (Michx.) Torr., C. odoratus L., Commelina hirtella Vahl, Juncus diffusissimus Buckley, J. effusus L., J. interior Wiegand, J. nodatus Coville, Polygonum coccineum Muhl., P. Persicaria L., P. punctatum Ell., Ceratophyllum demersum L., Nelumbo pentapetala Walt., Ludwigia alternifolia L., Nymphoides peltatum (Gmel.) Britten & Rendle, Heliotropium indicum L., Lindernia anagallidea (Michx.) Pennell, Utricularia biflora Lam. and Bidens frondosa L.

A year after the filling of Lake Atalanta the following six species of aquatic and shoreline plants were present: Potamogeton foliosus Raf. var. genuinus Fern., Kyllinga pumila Michx., Cyperus esculentus L., C. strigosus L. Leersia oryzoides (L.) Swartz and Nasturtium officinale R. Br. The Devil's Den reservoir, two years after filling, had a sparse flora of Chara sp. and Juncus effusus L. The exact age of the reservoir at Cave Springs, which is somewhat older, was not ascertained. Eight species were collected here. These included Chara fragilis Desvaux, Typha latifolia L., Potamogeton foliosus Raf. var. genuinus Fern, Leersia oryzoides (L.) Swartz, Cyperus strigosus L., Scirpus pallidus (Britton) Fern., Lycopus rubellus Moench and Mentha canadensis L.

Senecio tomentosus Michx., forma **alabamensis** (Britton) stat. nov. S. alabamensis Britton ex Small, Fl. Se. U. S. 1305 (1903).

Several collections from eastern Virginia, such as *Grimes*, no. 3552 from James City County, *Heller*, no. 850 from Isle of Wight County, and *Fernald & Moore*, nos. 15,162 and 15,163 from Nansemond County, show that *S. alabamensis* is at best an extreme glabrous or glabrescent form of the generally tomentose